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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,464	08/28/2003	Shawn P. Keeney	WHLK/043	7110
85174	7590	03/25/2010	EXAMINER	
WALL & TONG, LLP 595 SHREWSBURY AVE. SHREWSBURY, NJ 07702			TANG, SON M	
			ART UNIT	PAPER NUMBER
			2612	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/650,464	Applicant(s) KEENEY ET AL.	
	Examiner SON M. TANG	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 16, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 16, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim **16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Markwell et al. [US 6,532,406; Markwell] in view of Burnett et al. [US 5,675,311].

Regarding to claim 16: Markwell discloses an alarm unit [Fig. 3] comprising:

-an audio circuit (horn 56) for generating an audio warning signal, and an application specific integrated circuit (ASIC 40) coupled to said audio circuit (e.g. R105, C65 and R106 at pins 27-29), for triggering said audio warning signal, wherein said ASIC selects an audio frequency for said audio warning signal (e.g. different horn patterns selected by adjustments of circuit components, different pin connections, see col. 11, lines 50-59], Markwell stated that the horn pattern changed is changed in varying either the frequency or pitch, but does not specifically show that the horn pattern is a sweep frequency.

Burnett teaches an audio alarm comprising a sweeping audio frequency circuitry [see Fig. 1, col. 2, lines 43-65 and col. 1, lines 63-67]. It would have been obvious of one having ordinary skill in the art at the time the invention was made, to have a sweep frequency generator as suggested by Burnett, into the audio alarm of Markwell, for the benefit of enhancing the perception to the user, since sweep frequency audio alarm is well known in the alarm art and it is an unique alarm sound (e.g. from low frequency to high frequency) that would easy to identify.

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Although, Burnett does not specifically show that the sweep frequency of approximately 2500Hz to 4000Hz, but Burnett suggested that the values selected for the frequency determining network of resistors R5 and R6 and capacitor C4, along with voltage controlled oscillator (18) to establish the sweep frequency signal (28) [see Fig. 1 and Figs. 4a-4b, col. 4, lines 9-20]. Thus, one having ordinary skill in the art would find it obvious to select any appropriate resistors and capacitor values that suitable for generating any appropriate sweep frequency that user desired, such as approximately 2500Hz to 4000Hz as Applicant claimed.

3. Claim **13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Markwell et al. [US 6,532,406; Markwell] in view of Burnett et al. [US 5,675,311] and further in view of Bechtel [US 5,896,092].

Regarding to claim 13: Markwell discloses an alarm unit [Fig. 3] comprising:

-a flash circuit (60, R15) for generating a flash an application specific integrated circuit (ASIC 40) coupled to said flash circuit, for triggering said flash [col. 9, lines 18-26], an audio circuit (horn 56) for generating an audio warning signal, and an application specific integrated circuit (ASIC 40) coupled to said audio circuit (e.g. R105, C65 and R106 at pins 27-29), for triggering said audio warning signal, wherein said ASIC selects an audio frequency for said audio warning signal (e.g. different horn patterns selected by adjustments of circuit components, different pin connections, see col. 11, lines 50-59], Markwell stated that the horn pattern changed is changed in varying either the frequency or pitch, but does not specifically show that the horn pattern is a sweep frequency.

Burnett teaches an audio alarm comprising a sweeping audio frequency circuitry [see

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Fig. 1, col. 2, lines 43-65 and col. 1, lines 63-67]. It would have been obvious of one having ordinary skill in the art at the time the invention was made, to have a sweep frequency generator as suggested by Burnett, into the audio alarm of Markwell, for the benefit of enhancing the perception to the user, since sweep frequency audio alarm is well known in the alarm art and it is an unique alarm sound (e.g. from low frequency to high frequency) that would easy to identify.

Markwell and Burnett above do not specifically mention a flashtube. **Bechtel** teaches an alarm which comprising a flashtube (F1) of Fig. 7. It would have been obvious of one having ordinary skill in the art at the time the invention was made, to recognize that flashtube can used for visually alarm, one of the benefits to use flashtube in alarm system is the modification of reflector, which easy to configure the reflector in different direction around the flashtube.

Although, Burnett does not specifically show that the sweep frequency of approximately 2500Hz to 4000Hz, but Burnett suggested that the values selected for the frequency determining network of resistors R5 and R6 and capacitor C4, along with voltage controlled oscillator (18) to establish the sweep frequency signal (28) [see Fig. 1 and Figs. 4a-4b, col. 4, lines 9-20]. Thus, one having ordinary skill in the art would found it obvious to select any appropriate resistors and capacitor values that suitable for generating any appropriate sweep frequency that user desired, such as approximately 2500Hz to 4000Hz as Applicant claimed.

4. Claim **18** is rejected under 35 U.S.C. 103(a) as being unpatentable over Markwell et al in view of Burnett et al., Bechtel, and further in view of Park et al. [US 5,694,118].

Regarding to claim 18: Markwell and the combination disclose all the limitations as described above, except for not specifically mention that the flash circuit comprises a voltage

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doubler. Park et al. teaches an alarm unit comprising, a voltage doubler (108 in Fig. 6, col. 6, lines 1-10), whereby the voltage doubler circuit charges a capacitor of the light tube. It is obvious of one having ordinary skill in the art at the time the invention was made to employ a voltage doubler as suggested by Park et al. in the alarm unit of the combination above, so that the increased voltage can be supplied to light tube, which increases the intensity of the light, to vary the output (i.e. shine brighter equal louder horn).

5. Claim **19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Markwell et al in view of Burnett et al., Bechtel, and further in view of Smith et al. [US 2004/0169585].

Regarding claim 19: Markwell and combination made obvious above, except for not specifically mention that the charge cycle is greater than 8 KHz. Smith et al. teaches a pest deterrence alarm apparatus comprising a microcontroller provides a charge of 20 KHz to flash capacitor, which is greater than 8 KHz. [see ¶ 0036]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention to implement a charge cycle that is greater than 8 KHz. as suggested by Smith et al. in the flash circuit of the combination above, so that flash circuit is being able to increase flash pulses as user desired.

Response to Arguments

6. Applicant's arguments filed 12/30/09 have been fully considered but they are not persuasive.

Applicant argued: Regarding to all the claims, Applicant focused to the issue of Burnett fails to suggest the audio frequency is a sweep frequency of approximately 2500 (Hz) to 4000

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(Hz), instead, Burnett obtained a frequency range of between 1000 (Hz) to 2000 (Hz), which do not overlap nor are they even close to Applicant claimed.

Examiner responsive: (i) All of the combined references are in the same field of invention, which are perfectly combinable. (ii) Burnett teaches an audio sweep frequency, wherein the center frequency is at about 1500 Hz, therefore, the sweep frequency of a range approximately 1000 (Hz) to 2000 (Hz). Burnett clearly suggested that center frequency can be adjusted or controlled, based upon the selection of resistors and capacitor values of resistors R5 and R6 and capacitor C4 network. In that, it is obvious that the center frequency can be adjusted (e.g. approx. 3000 Hz), if appropriate values are selected for R5, R6 and C4 for a preferred application. Since the resistor and capacitor network is able to generate center frequency at 1500 Hz range, it would have been obvious to establish at 2500 Hz range as well.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing

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date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SON M. TANG whose telephone number is (571)272-2962. The examiner can normally be reached on 5/8.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. M. T./
Examiner, Art Unit 2612

/Daniel Wu/
Supervisory Patent Examiner, Art Unit 2612